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## ABSTRACT

Described are nucleotide sequences coding for and regulating expression of a cell cycle regulatory protein, designated p193, and recombinant vectors and host cells containing nucleotide sequences coding for and regulating expression of the protein sequence. Also described are methods for modifying the cell cycle of a cell by regulating p193 or its pathway. Methods for inducing apoptosis in cells are provided by increasing level of a pro-apoptotic p193 protein in the cells. Methods for suppressing apoptosis in or increasing the proliferative potential of cells are provided by reducing the level of pro-apoptotic p193 protein the cells and/or by interfering with the native p193 signal transduction pathway, for instance utilizing a p193 protein having a dominant negative mutation.